

### ABSTRACT OF THE DISCLOSURE

An apparatus and method for the two-dimensional direct intermediate frequency sampling of a received signal. A receiver is equipped with a circuit for converting a received radio frequency signal to an intermediate frequency signal. The converted intermediate frequency signal is sampled by a pair of lowpass analog-to-digital converters. The sampling scheme involves quadrature envelope sampling of the intermediate frequency signal. The sampling scheme further involves sampling the Q-channel signal at a quarter of the intermediate frequency carrier period after the I-channel signal is sampled.